

## EAST Search History

| Ref # | Hits | Search Query                        | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|-------------------------------------|---|------------------|---------|------------------|
| S1    | 942  | 425/385.ccls.                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 14:51 |
| S2    | 430  | 425/391.ccls.                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 14:51 |
| S3    | 978  | 425/392.ccls.                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 14:51 |
| S4    | 644  | 425/393.ccls.                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 14:51 |
| S5    | 832  | 425/394.ccls.                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 14:51 |
| S6    | 592  | 425/403.ccls.                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 14:51 |
| S7    | 826  | S1 not (S2 or S3 or S4 or S5 or S6) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 14:52 |
| S8    | 368  | S2 not (S1 or S3 or S4 or S5 or S6) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 14:52 |
| S9    | 785  | S3 not (S1 or S2 or S4 or S5 or S6) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 15:00 |
| S10   | 482  | S4 not (S1 or S2 or S3 or S5 or S6) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 15:15 |
| S11   | 707  | S5 not (S1 or S2 or S3 or S4 or S6) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/04/12 15:25 |

## EAST Search History

|     |     |  |   |    |     |                  |
|-----|-----|--|---|----|-----|------------------|
| S12 | 385 | S6 not (S1 or S2 or S3 or S4 or S5)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/12 15:23 |
| S13 | 13  | ("2898970"   "3072396"   "3466707"<br>  "3776539"   "3878720"  <br>"3884612"   "4156588"   "4158586"<br>  "4273523"   "5129636").PN. | US-PGPUB;<br>USPAT;<br>USOCR                | OR | OFF | 2006/04/12 15:33 |
| S14 | 1   | ("5290166").URPN.  | USPAT                                       | OR | OFF | 2006/04/12 15:38 |
| S15 | 3   | (S8 or S9 or S10 or S11 or S12) and<br>(spring near mandrel)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:48 |
| S16 | 13  | ("2898970"   "3072396"   "3466707"<br>  "3776539"   "3878720"  <br>"3884612"   "4156588"   "4158586"<br>  "4273523"   "5129636").PN. | US-PGPUB;<br>USPAT;<br>USOCR                | OR | OFF | 2006/04/12 16:07 |
| S17 | 942 | 425/385.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S18 | 430 | 425/391.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S19 | 980 | 425/392.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S20 | 645 | 425/393.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S21 | 838 | 425/394.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S22 | 593 | 425/403.ccls.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S23 | 368 | S18 not (S17 or S19 or S20 or S21<br>or S22)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S24 | 787 | S19 not (S17 or S18 or S20 or S21<br>or S22)   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S25 | 483 | S20 not (S17 or S18 or S19 or S21 or S22)                                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S26 | 713 | S21 not (S17 or S18 or S19 or S20 or S22)                                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S27 | 386 | S22 not (S17 or S18 or S19 or S20 or S21)                                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S28 | 1   | (S23 or S24 or S25 or S26 or S27) and (corrugated near mandrel)           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:49 |
| S29 | 21  | (S23 or S24 or S25 or S26 or S27) and (corrugated near (pipe or mandrel)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/13 10:50 |

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